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Compassion Focused Psychosexual Therapy for Women Who Experience Pain during Sex

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Abstract

Genito-Pelvic Pain Penetration Disorder (GPPPD) affects between eight and twenty percent of women. There is recent evidence that compassion focused therapy (CFT) can help those with general health conditions and persistent pain. This study aims to investigate application of CFT techniques to an existing psychosexual therapy group of women with GPPPD and establish an effect size that could be used in a fully powered trial in future. The study took place within a routine clinical setting. Women who attended a group workshop for GPPPD were invited to complete outcome measures pre-and post-intervention. This study was uncontrolled and unpowered, with the aim of evaluating effectiveness of a novel intervention piloted within a sexual health service. Findings indicated that for the majority of the participants, their self- confidence in managing their sexual difficulty improved over the course of the workshop and their pain frequency and intensity reduced over the sessions. A significant improvement in positive and negative self-compassion and confidence was found. Improvements in sexual distress were also found. The negative aspects of self-compassion were significantly correlated with sexual distress at both pre- and post- intervention. Result

from this pilot study appear encouraging and indicate that CFT interventions, specifically related to sexual health and pain, warrant further investigation. Further research would benefit from completing a comparison study and using a larger sample and validated measures.

Keywords
Female sexual pain; compassion focused therapy; self-compassion; GPPPD; sexual distress

1. Introduction

Genito-Pelvic Pain Penetration Disorder (GPPPD) is defined as a female sexual disorder characterised by four symptoms; difficulty with vaginal penetration, marked genital or pelvic pain during attempted or actual intercourse, significant fear of pain as a result of vaginal penetration, and tensing or tightening of the pelvic floor muscles during attempted vaginal penetration [1]. Prevalence rates of GPPPD are estimated between eight and twenty percent [2, 3].

The biopsychosocial model can be useful to formulate GPPPD as it is a multifactorial condition. A number of organic and physiological factors are associated with and may contribute to GPPPD e.g. genitourinary syndrome of menopause (GSM), vulvo-vaginal infections, skin conditions, fibromyalgia, and peri/postpartum difficulties, amongst other metabolic and hormonal alterations [4-10]. There is also evidence of a relationship between GPPPD with unwanted sexual experiences(USE), emotional abuse and other social complexities, such as cultural sexual beliefs [11, 12]. In our service, we practice and support a multi-disciplinary assessment for those with GPPPD. However, this paper is primarily going to focus on the psychological treatment of GPPPD.

Current psychological treatment for general sexual dysfunctions integrates a variety of approaches, including cognitive behaviour therapy (CBT) [13, 14], systemic approaches with couples [15] and more recently mindfulness-based therapies [16]. However, there is a growing evidence for using compassion focused therapy (CFT) [17-19] for the psychological treatment for health conditions and general persistent pain, for which GPPPD is similar. CFT is an integrative therapy, including theory and technique from neuroscience, cognitive psychology, evolutionary psychology, Gestalt therapy and eastern approaches such as Mindfulness. CFT helps clients develop feelings of support, safeness and soothing as a way of regulating difficult emotions such as fear and anger (the "Threat" system) [17], and has been shown to be beneficial for difficulties such as anxiety, depression and rumination, particularly for clients indicating high self-criticism [20]. CFT is based on our understanding of compassion, a sensitivity to suffering and the commitment to try to alleviate and prevent it [17, 21]. Self-compassion (SC) has also been characterised by self-kindness, an understanding that suffering is universal and mindfulness [22].

It has been found that SC is associated with reduced mental health difficulties such as anxiety, depression, and stress for clients with various types of chronic pain [23]. Self- compassion has also been found to be lower in couples struggling with infertility [24], and associated with relationship satisfaction in couples affected by Vulvodynia [25].

Some studies have began to investigate the role of SC in relation to GPPPD. For example, Santerre-Baillargeon and colleagues [25] found that higher SC was related to lower depression,

anxiety and sexual distress in women with GPPPD (although they did not find any association with variables more specific to GPPPD). Vasconcelos, Oliveira and Nobre [26] found that women with GPPPD tended to have lower levels of SC and more difficulties with emotional regulation than women without GPPPD. These studies highlight a potential relationship between SC and GPPPD, however there is no research on interventions that might help improve SC associated with GPPPD in a group setting. The only published study which appears to have adapted CFT to a group setting was at a pain clinic where they found a reasonably positive effect [18], demonstrating a potential application for women with GPPPD.

This study aims to investigate the application of CFT techniques to an existing psychosexual therapy workshop of women with GPPPD. The usefulness of the workshop will be measured using outcome measures on 1) pain intensity and frequency 2) confidence with managing sexual difficulty 3) ratings of sexual distress 4) ratings of SC related to sexual difficulties. The psychosexual workshop offers women an opportunity to increase their knowledge of steps they can take to reduce their pain during penetrative sex, in addition to an introduction to compassion and how it can apply to their sexual difficulties. This is a relatively short-term intervention of only four 90-minute sessions. Therefore, it is not expected that the experience of pain will reduce substantially over the course of the workshop. However, it was hypothesised that an increase in positive SC and confidence in making positive changes might be observed, alongside a decrease in reported sexual distress over the course of the workshop.

2. Materials and Methods

This service evaluation was registered with the NHS Trust Research and Development team (ID 10315). As no additional measures were given to participants in the workshop, the study was deemed to be a service evaluation rather than research project. Therefore, NHS research ethical approval was not required. All participants were given information about the content of the workshop, and consented to treatment and completion of routine outcome measures.

The service evaluation was uncontrolled and unpowered, with the aim of evaluating effectiveness of a novel intervention piloted within the service.

2.1 Intervention Model

The group intervention was primarily based on evidence-based psychosexual therapy for women experiencing pain during sex [13, 14, 16, 27]. Psychoeducation topics included a formulation of pain cycles of thoughts, feelings, sensations and behaviour during sex and the role of arousal. Evidenced-based strategies to challenge these pain cycles were introduced, including Kegel breathing, using vaginal dilators, graded practice, challenging unhelpful thoughts, sensate focus and mindfulness. In addition to the standard intervention for pain during sex, some additional aspects were included from CFT [28, 29]. For example, a "Three Systems" model of affect regulation, consisting of "Drive" systems (excitement, reward seeking, consuming), "Threat" systems (fear, anger, disgust, protection) and "Soothing" systems were mapped out and explained. Education about the evolution of the brain, emotional and sexual systems were also presented. The concept of a "tricky brain" was introduced, adding to one of the key messages normalising difficulties. CFT conceptions of "inner critics" were introduced with the idea of an "inner sex critic", alongside an introduction of a "compassionate response" to this critic (inviting attributes of warmth, non-judgement, wisdom and

strength). Traditional sex-therapy techniques were introduced in line with the CFT focused formulation. For example, using sensate focus to activate the "Soothing" system, which may then up-regulate the "Drive" system. The group intervention involved attending four sessions over the course of eight weeks. Outcome measures were completed pre- and post-intervention.

2.2 Participants

All of the participants before being offered the workshop were assessed by a multi-disciplinary team and any organic or physiological conditions thought to contribute to the participant's pain e.g. vulvo-vaginal infections, genital dermatoses, hormonal or gynaecological conditions had already been assessed and appropriate treatment provided, including signposting to our menopause clinic.

Six separate workshops (consisting of four sessions each) were delivered over the time period of 2017 to 2018, each offering spaces for up to six women (N = 36). Of the 36 women invited to the workshops, 23 women attended the group intervention and completed at least some of the items on the pre-and post-intervention measures. Limited demographic information is available, as we did not collect any further data other than routine clinic data collected on registration. Unfortunately, data was not collected on women who were invited, but did not attend the workshop.

The 23 participants all identified as cis-gender female and their ages ranged from 21-46 (M = 31) (Table 1). Participants country of birth and ethnicity are presented in Table 1.

Table 1 Participants demographic characteristics.

	N	Percentage
Age		
21-25	4	17.39
26-30	9	39.13
31-35	4	17.39
36-40	3	13.04
41-45	2	8.70
46-50	1	4.35
Country of birth		
UK	13	56.52
European countries	5	21.74
South East Asia	2	8.70
Unknown	3	13.04
Ethnicity		
White	7	30.43
White other	5	21.74
Bangladeshi	5	21.74
Unknown	3	13.04

'Mixed'	1	4.35
Indian	1	4.35
African	1	4.35

Our inclusion criteria for the workshops were that women had to present with GPPPD in their assessment. Exclusion criteria for the group included a strong aversion to a group setting, active severe and enduring mental health difficulties (those with a history of this were still invited), or if they were actively at risk from themselves or to others.

2.3 Measures

The following quantitative measures were given at the first and last sessions:

2.3.1 GAD 2 and PHQ2

The Generalized Anxiety Disorder two-item (GAD-2) is a brief version of the GAD-7 [30] which can be used as a screening tool for generalised anxiety disorder. Likewise, the Patient Health Questionnaire two-item (PHQ-2) is the shorter version of the PHQ-9 [31] which is used to screen for depression. The reported internal consistency of this measure is good for the PHQ-2 (Cronbach α = 0.83) and GAD-2 (Cronbach α = 0.81), along with test-retest reliability (PHQ-2 = 0.79, GAD-2 = 0.81) [31].

2.3.2 Pain Intensity, Frequency and Confidence

Pain intensity, frequency and confidence were assessed using three Likert scales developed for this workshop. The questions were how often they experienced discomfort or pain during vaginal touch or penetration, the level (degree) of the discomfort or pain, and confidence in coping with the discomfort or pain within the last two weeks.

2.3.3 Female Sexual Distress Scale

DeRogatis, Rosen, Leiblum, Burnett and Heiman [32] designed the 13-item Female Sexual Distress Scale (FSDS) to measure sexually- related personal distress in women. Participants respond using a Likert scale ranging from 0 ("never") to 4 (“always"). The reported internal consistency of this measure is good (Cronbach α = 0.86), along with test-retest reliability (>0.74) [33].

2.3.4 Self-compassion Scale (Short Form)

The Self-Compassion Scale (Short Form) (SCS-SF) is a twelve-item measure adapted from the longer version of the Self-Compassion Scale [34]. The scale measures SC according to Neff's model of SC, including attributes of common humanity, mindfulness and self-kindness [22]. Validations studies found that it demonstrated adequate internal consistency (Cronbach's alpha>=0.86) and showed a very high correlation with the longer version of the measure (r>=0.97) [34]. The measure includes positive and negative aspects of SC; these scores can be calculated as separate subscales or an overall score can be used. Wording of the SCS-SF was changed to fit the aim of the workshop by asking them to answer the questions specifically related to their GPPPD. This decision was made

because previous research using this measure found the wording too distal to detect the changes of their specific intervention [25]. Internal validity for this adapted measure was not calculated as Cronbach's alpha is unlikely to be valid in small samples due to large standard errors. The limitation of adapting this measure is noted in the discussion.

3. Results

Data was analysed using the Statistical Package for Social Science (SPSS version 25.0). Tests for normality found that scores for FSDS and SC (both negative and positive) met parametric assumptions. Cohen's d effect size was calculated for these measures to examine the extent of change between pre- and post-scores. Scores on pain intensity, frequency and confidence did not meet parametric assumptions; therefore, Wilcoxon-signed ranks tests were used, where appropriate.

3.1 GAD-2 and PHQ-2 Scores

Although there was a reduction in GAD scores over the course of the workshop (pre – M = 2.48 (1.47), post- M = 2.26 (1.60)), a Wilcoxon signed-rank test did not suggest a significant change (Z = -.604, p = .546). Mean scores on the PHQ-2 increased over the course of the workshop (pre- M = 1.39 (1.23), post- M = 1.65 (1.27)), but again this was not found to be significant (Z = -1.303, p = .193).

3.2 Pain Frequency & Intensity

In terms of pain frequency, 37% (n = 7) of participants reported reduced pain frequency over the sessions. However, another 37% (n = 7) did not attempted vaginal touch or intercourse, whereas 26% (n = 5) did not experience any difference in the frequency of pain they experienced.

For pain intensity, 50% (n = 10) of the participants felt that their pain intensity during vaginal touch or intercourse had reduced over the course of the workshop, whereas 15% (n = 3) did not experience any change, and 35% (n = 7) did not attempt any vaginal touch or intercourse.

3.3 Confidence in Coping with Sexual Difficulty

For 64% (n = 14) of participants, their confidence in coping with their sexual difficulty improved over the course of the workshop, whereas 22% (n = 5) reported no change and 13% (n = 3) stated it had in fact got worse. A Wilcoxon signed-rank test showed that the improvement in confidence over the course was statistically significant (Z = -2.60, p = .009). This was seen clearly through the mean scores (pre – M = 1.00 (.953), post- M = 5.91 (20.32)).

3.4 Female Sexual Distress

The mean FSDS score across the 22 women reduced following treatment (Table 2). The mean change in pair-wise FSDS scores between pre- and post- intervention was 8.78 (SD = 10.18). This represents a significant change in FSDS scores between pre- and post-intervention, t(22) = 4.14, p<0.001, CI(4.38-13.19) (Cohen's d = 0.86).This significant result also sustained following a Bonferroni test for multiple comparisons.

3.5 Self-compassion Scale (Positive Items)

The mean score for positive aspects of SC increased over the course of treatment (Table 2). The mean change in pair-wise positive SC scores between pre- and post- intervention was -3.70 (SD = 5.50). This represents a significant change in positive SC scores between pre- and post-intervention, t(22) = -3.22, p<0.05, CI(-6.07- -1.32) (Cohen's d = -0.67).

Table 2 Mean pre- and post-intervention summary scores for FSDS and self-compassion.

	Pre- mean (SD)	Post-mean (SD)
Female Sexual Distress	32.39 (11.89)	23.60 (11.10)
Self-Compassion Scale (positive items)	15.34 (4.60)	19.04 (4.01)
Self-Compassion Scale (negative items)	21.21 (5.89)	(5.63)

3.6 Self-compassion Scale (Negative Items)

In terms of the negative items of the SCS-SF, these reduced over the course of treatment. (Table 2). The mean change in pair-wise negative SC scores between pre- and post-intervention was 4.35 (SD = 6.23). This represents a significant change in negative SC scores between pre- and post-intervention, t(22) = 3.35, p<0.05, CI(1.66-7.04) (Cohen's d = 0.70).

3.7 Correlations

Exploratory correlations were conducted between the main measures of interest: positive SC, negative aspects of the SCS-SF and the FSDS (at both pre- and post-intervention). No significant correlations were found between positive and negative aspects of SC at the start or end of the intervention. The negative aspects of SC were significantly correlated with the FSDS at both pre- and post- intervention (r = 0.46, p = 0.26; r = 0.62, p = 0.001). However, no correlations were found between positive aspects of SC and the FSDS pre- or post-intervention.

4. Discussion

The current study is the first exploration of CFT for women with GPPPD. It aimed to investigate whether the application of CFT techniques, to an already existing psychosexual therapy workshop, had potential positive outcomes for women attending, and if so, that an effect size could be established to aid a fully powered trial in future.

The workshop aimed to reduce the women's perceived threat to the pain and give them steps to decrease the pain. Achievement of this was successful, as seen by an increase in the confidence of using methods known to reduce the pain. The workshops also offered women an opportunity to decrease shame and self-criticism about pain, in addition to increase compassion by introducing concepts such as the "inner sex critic", and a "compassionate response" to this critic. The workshop was successful in achieving this, seen by a reduction in negative SC and increase in positive SC, both of which were found to be significant with a medium-to-large effect size. Finally, the women were also found to have a significant decrease in their sexual distress, with a large effect size. This was expected, possibly a result of providing a normalising biopsychosocial perspective of pain, with CFT concepts, such as a "tricky brain" which has evolved over thousands of years, alongside an understanding of the impact of social and relational factors on the experience of pain.

The results also highlight that over the course of the intervention, some women did not attempt vaginal touch or intercourse. This result was to be expected, as the workshop initially encouraged women to stop attempting penetrative sex in the short term, to reduce negative reinforcement, and to help reduce triggering a "Threat" response. Despite this, some women continued to attempt penetration over the course of the workshop. For those who did attempt penetrative sex over the course of the workshop, their self-reported pain frequency reduced. However, there was no significant change when scores were analysed together. For those women who did not experience any change in pain, this was unsurprising as the workshop was offering strategies such as use of dilators and graded practice, which typically require a longer period of time than the four sessions provided. It should be noted that in line with service provision, after attending the workshops, the women were also offered two-to-four follow-up sessions to specifically work on their graded practice and using dilators. It is expected that the women's pain frequency and intensity would further reduce over this period, aided by their understanding and confidence achieved by the workshop. In terms of the non-significant changes to the GAD-2 and PHQ-2 scores, these findings are unsurprising as these measures are used mostly as a screening tool to enter the workshop and the sessions are not targeting specific anxiety and low mood interventions.

4.1 Link to Research and Wider Implications

Overall, the positive findings from the evaluation of this pilot workshop suggest potential for interventions for GPPPD to include a CFT component. On the FSDS (a well-used and validated scale), distress associated with this sexual difficulty reduced. Positive aspects of SC related to their sexual difficulties appeared to improve (self-kindness/mindfulness/common humanity) and scores for negative aspects of SC (self-criticism/self-judgement) decreased. These initial positive findings support previous pilot workshops introducing compassion focused interventions for other forms of pain conditions [18].

Although there has been considerable exploration and investigation of compassion in relation to mental health and physical health in other domains, research remains very sparse within the field of sexual health and sexual pain. This pilot study supports the emerging evidence in the field that self-compassion may be an important target in psychosexual therapy for GPPPD [25, 26].

Although evidence specific to SC is still very limited, there is considerable evidence that GPPPD is associated with shame and self-criticism [35-37]. Thus, interventions that address this specifically and directly (e.g. CFT) may be very important for this population. Recent research has pointed to the effectiveness of mindfulness interventions for female sexual difficulties [16], which often include aspects of compassion (in particular accepting the present moment and moving away from judgement of one's own thoughts). However, CFT proposes that building on "competencies of compassion" directly and alongside mindfulness skills can be very beneficial particularly where there is high shame or self-criticism [19]. Understanding and challenging self-criticism (e.g. inner critic exercises in CFT) [29] may be very helpful for those who experience high self-criticism in relation to GPPPD. One of the key messages in CFT is that psychological difficulties are not attributable to a personal shortcoming or failure. Instead, many psychological difficulties are a reflection of how our brains have evolved over time to manage a variety of threats [38]. This is referred to as the "tricky brain" [29]. This is also an important and key message in GPPPD, where women can feel alone and "abnormal" due to their experience. The CFT model emphasises that

vicious cycles maintaining pain would be *expected* given the way our brains and bodies have evolved and aims to develop ways to manage a "tricky brain" rather than correct faulty or biased thinking. Many of the CFT techniques are similar to those in behavioural and cognitive approaches, however the starting premise is one of de-shaming and normalising of difficulties.

Another key part of the CFT model is to conceptualise basic emotions with a "Three Systems Model" for mapping threat responses, "Soothing" system responses and "Drive" system responses [28]. This is a normalising and accepting approach to experience of emotions (similar to other third wave approaches), and explicitly links to sympathetic and para-sympathetic nervous system responses. This accessible model of emotions is highly relevant to GPPPD, where there is a need to activate the "Soothing" system to manage the "Threat" system (for example using mindfulness or sensate focus).

One important point to note is that the group nature of the intervention in itself may have increased some positive aspects of compassion, such as understanding the problem as shared rather than an individual and isolating experience. To meet others who are experiencing a similar problem in itself is normalising. Previous service feedback on these workshops has strongly suggested that the group is a helpful format for this reason [39]. A comparison study would be needed to unpick which aspects of compassion are improved solely by the group nature and existing formulations and techniques, as opposed to more specific CFT aspects of the workshop.

The FSDS scores and positive SC scores both reduced significantly, however were not correlated with each other. This suggests that positive aspects of SC related to sex as measured on the scale may constitute a different construct that is important to consider in GPPPD. Although there are a number of scales that measure SC generally, there are currently no scales available that measure SC related explicitly to difficulties with sex. Previous studies have noted that measuring SC more generally may be too distal to pick up relationships more specific to GPPPD [25]. This suggests that further work specifically exploring domain-specific SC related to sex and potentially measure its development may be an important future area of work.

The negative SC scores (representing negative self-judgement and not seeing difficulties as part of "common humanity") were correlated with the scores on the FSDS, suggesting potentially overlapping constructs. Considering the items on the scales relating to negative emotion words (in particular shame), this is not surprising. The inclusion of both positive and negative aspects of SC in the SCS-SF makes the definition of the construct of compassion unclear (e.g. including self-judgement and criticism). More recent scales measuring SC have aimed to be more focused on the definition of compassion, for example the Compassionate Engagement and Action Scales [40].

4.2 Limitations

A major limitation of the study is that non-validated measures were used. For example, questions on women's sexual self-confidence and the intensity/frequency of pain were designed for the purpose of the project. Given the small sample size, the psychometric properties of this rationally constructed self-report measures could not be identified, which has an impact on the reliability and validity of the findings. Items on the SCS-SF were also changed slightly to fit the aim of the workshop, as previous research using this scale found that the measure was too distal to detect the changes of their intervention [25]. This was useful to do to ensure the change was captured, however it invalidates the psychometric properties of the measure. A suggestion for further work within this

field would be to use a prefix to a measure indicating a specific area that it is measuring rather than general compassion or changing the wording of the specific items. An alternative measure to be piloted by the facilitators of this study is to use the Compassionate Engagement and Action Scales (CEAS) [40] as the theory and definition used in the workshop are based on Gilbert's theory and practice model. This may avoid any potential construct overlap with the negative scale of the SCS-SF and the FSDS, as the CEAS was designed to be a more focused scale, including less items relating to shame and self-criticism.

We also note an improvement in sexual distress, however this was not supported by an assessment of actual sexual functioning e.g. the Female Sexual Function Index (FSFI) [41].This may have been helpful to have corroborated the improvement in functioning as well as a reduction in distress. The FSDS includes frequency and intensity of the pain which gives insight into their functioning, however this may have been useful to have as a standalone measure.

Although using non-validated measures is a major limitation, and the use of additional questionnaires may have been useful, it is important to recognise that this service evaluation project was based on a pilot group to see if the workshop led to changes on self-compassion around sexual issues and we were mindful of the questionnaires not becoming too burdensome. As a result of finding an overall positive result of the workshop, we hope that these results indicate a rationale for future scale development.

A high prevalence of GPPPD has been found for those who have had USE and emotional abuse [11, 12]. Another limitation of this study is that we did not have any explicit data on the experience USE or emotional abuse for our participants, and so we could not investigate the modulating role of USE and abuse in the effectiveness of the workshops. Despite this, we know that for those with experiences of traumas such as these, presentations may include self-blame, lack of trust and struggling to regulate threat-based emotions [42]. Led by Lee and colleagues, CFT is thought to be a useful and appropriate model for those who have experienced past traumas [42] and emerging research supports this demonstrating that experiences of shame and self-criticism benefit from compassion focused approaches [43]. Future research would benefit from collecting data on USE at assessment and measuring trauma symptoms pre and post the workshop.

We also discussed the organic and physiological factors which may trigger or exacerbate the symptoms of GPPPD. Although this was not the focus of this group intervention and subsequent paper, future research would also benefit from including these medical conditions in their analysis. Subsequently, there is growing evidence that CFT can help with chronic pain conditions e.g. fibromyalgia [7]. Therefore, it would be helpful to explore the effectiveness of a CFT workshop for those with these additional conditions.

This study was based on a service evaluation, with no control group. As a result, it is unclear whether the results found were a function of the content of the workshops, rather than placebo or some alternative factor. Therefore, we cannot measure the added value of the compassion aspect to the workshops. The study also did not have a large sample and the data used was only for those women who completed the workshop. Therefore, we cannot account for the experiences of those who dropped out or who had missing data. This makes the results difficult to generalise and means that the project was not powered enough for a full study. As a result, the significance of the results obtained may be prone to type two error (false positive).

Finally, as mentioned previously, the intervention was short-term, and many a lot of the group interventions were ideas to be taken forward in the grading process of working with GPPPD. The

project did not complete any follow-up measures to see if the knowledge of these steps to reduce pain equates to a long-term reduction in pain, which would be useful to do with future research.

4.3 Further Directions

An overall positive impact of this intervention was found with women in a clinical setting, with broad inclusion and exclusion criteria. This highlights the real-life application of the workshops and the generalisability of the findings. A comparison study would be needed to compare an intervention both with and without the CFT aspects to determine the impact it has on the success of the intervention. Further research on the concept of "sexual SC" as distinct from more SC could broaden our understanding of compassion, in general.

5. Conclusions

This study evaluated the success of a workshops based on general psycho-education, traditional sex therapy techniques and specifically CFT for women with GPPPD. Result from this pilot study appear encouraging and indicate that CFT interventions, specifically related to sexual health and pain, deserve further investigation. Further research would benefit from completing a comparison study and using a larger sample with validated measures.

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Author Contributions

Design of the workshop was conducted by Dr. Jane Vosper, Dr Rhiann Jamieson and Dr. Stuart Gibson. Data collection was completed by all the authors. Data analysis and interpretation, and study write- up was conducted by Dr. Felicity Saunders and Dr. Jane Vosper. Dr. Stuart Gibson provided literature sources and writing assistance.

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Competing Interests

The authors have declared that no competing interests exist.

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